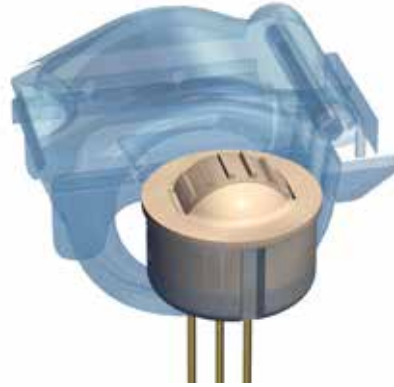


Volume Control DCU Scroller

1. Handling

Handle the VC by the body to avoid mechanical stress to the leads.



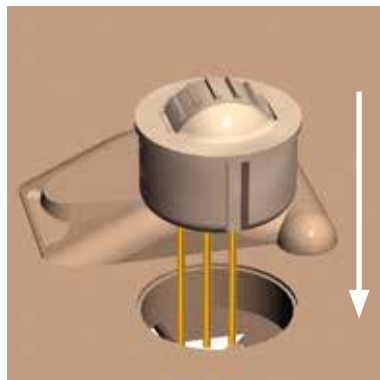
2. Tools

Proper tools should be used for cutting and bending, such as sharp cutters and soft-sided tweezers.



3. Mounting/Assembly

The diameter of the hole in the faceplate must fit the mechanical dimension of the volume control body. If the hole is too big, the adhesive bond may not be strong enough and the cosmetic appearance will be negatively affected. If the hole is too small, the volume control might be deformed during mounting and, subsequently, damaged during the soldering process.



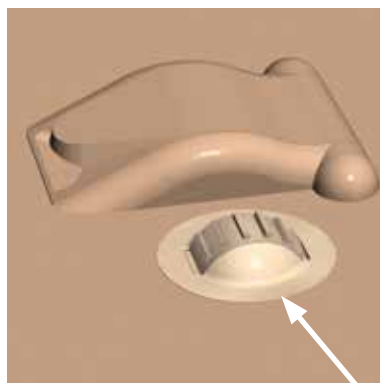
a.

Carefully press on the housing rim when inserting the DCU Scroller



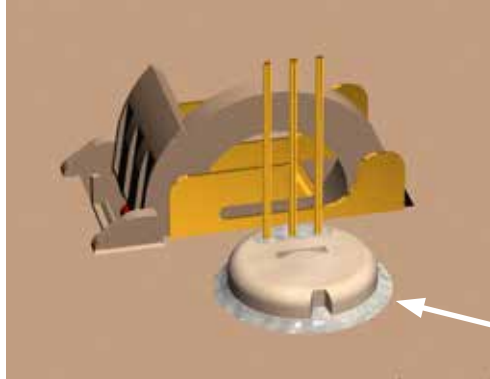
b.

Check again to be sure that the VC is completely seated in the faceplate



4. Gluing

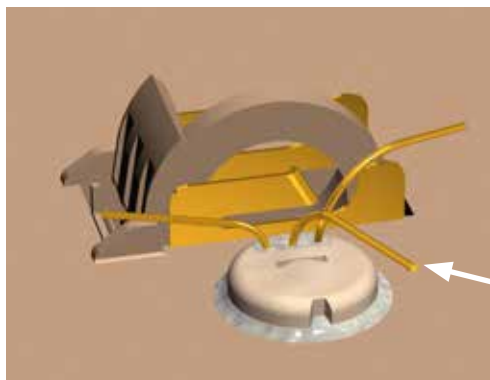
In order to obtain sufficient attachment between the volume control and faceplate, it is recommended to apply a minimum of leveled glue into a ring around the volume control as close to the body as possible. Quality and reliability level will be obtained by using the glue types recommended by Sonion.



Please refer to the Data Sheet of the DCU Scroller for our recommendation of glue types, which have been tested and proven not to degrade the plastic. Use of other glue types may be harmful to the plastic, for example due to curing fumes from the glue.

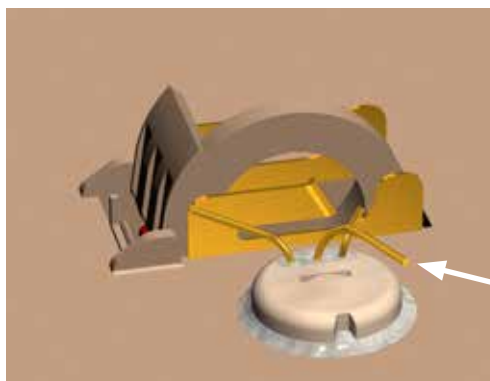
5. Bending

Bend the leads before cutting to ensure a minimum of mechanical stress during further processing of the volume control.



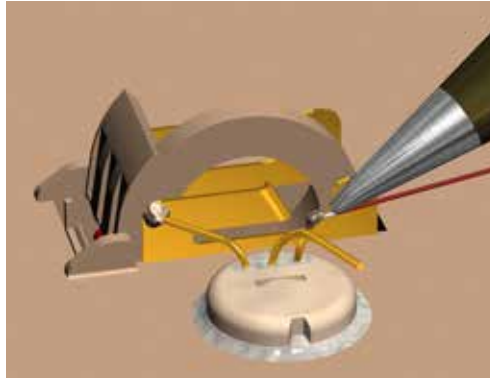
6. Cutting

Cut the leads without pulling or pushing them prior to soldering.



7. Soldering

Recommended soldering temperature and time: 300°C [572°F] for 3 s or 350°C [662°F] for 1 s.



a.

Avoid pressure on the leads by the soldering iron, and keep a minimum distance from the housing of 0.3 mm [0.012"].

b.

Avoid mechanical stress to the leads during processing and 3-5 s after soldering, as a potential heat build-up might degrade the component specifications.

c.

If additional flux is needed, use the smallest amount possible. Some types of flux have high alcohol content, and excessive exposure may damage the plastic parts.

8. Cleaning

Flux residues may need to be removed by solvents, or cleaning agents. Please refer to the recommended cleaning solvents below:

- Aqua wash (Alpha 2110)
- Benzine

These cleaning solvents have been tested and proven not to degrade the plastic, or the resistance element. Use of any other solvents, or cleaning agents may be harmful to the plastic (ref. data sheet on DCU Scroller). We strongly advise against the use of any ultrasonic cleaning of the component.

9. General Operating Conditions

To minimize any risk of degrading the component quality, avoid any sideways stress or excessive radial pressure during normal rotation and hearing instrument processing.

Any questions in relation to this Application Note can be addressed to Customer Quality Service (CQS), in Roskilde, Denmark - e-mail: sonion.cqs@sonion.com